

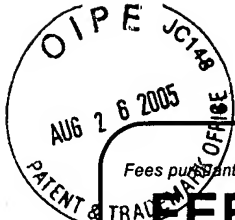
JFW

	Application Number	10/816,552	
	Filing Date	March 31, 2004	
	First Named Inventor	TAKAOKA, Nobumitsu	
	Art Unit	2188	
	Examiner Name	Mano Padmanabhan	
Total Number of Pages in This Submission		Attorney Docket Number	16869S-112800US

ENCLOSURES (Check all that apply)				
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Petition to Make Special for New Application Appendix A, Table of Contents, and 5 refs. Return Postcard		
<table border="1"> <tr> <td>Remarks</td> <td>The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.</td> </tr> </table>			Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.
Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.			

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	Townsend and Townsend and Crew LLP		
Signature			
Printed name	George B. F. Yee		
Date	August 24, 2005	Reg. No.	37,478

CERTIFICATE OF TRANSMISSION/MAILING			
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Signature			
Typed or printed name	Elizabeth Nesbitt	Date	August 24, 2005



Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

**FEE TRANSMITTAL**  
**For FY 2005**☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 130**Complete if Known**

Application Number	10/816,552
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First Named Inventor	TAKAOKA, Nobumitsu
Examiner Name	Mano Padmanabhan
Art Unit	2188
Attorney Docket No.	16869S-112800US

**METHOD OF PAYMENT** (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_  
☒ Deposit Account Deposit Account Number: 20-1430 Deposit Account Name: Townsend and Townsend and Crew LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee  
☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES Small Entity		SEARCH FEES Small Entity		EXAMINATION FEES Small Entity		Fees Paid (\$)
	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Small Entity	
	Fee (\$)	Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims	Fee (\$)	Fee Paid (\$)
_____ -20 or HP = _____	x _____	= _____				

HP = highest number of total claims paid for, if greater than 20

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
_____ -3 or HP = _____	x _____	= _____	

HP = highest number of independent claims paid for, if greater than 3

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____ - 100 = _____	/ 50 = _____	(round up to a whole number) x _____	= _____	

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

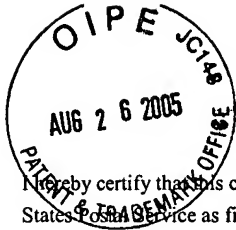
Other: Petition Fee

**Fees Paid (\$)**

130

**SUBMITTED BY**

Signature		Registration No. (Attorney/Agent) 37,478	Telephone 650-326-2400
Name (Print/Type)	George B. F. Yee		Date August 24, 2005



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**PATENT**  
Attorney Docket No.: 16869S-112800US  
Client Ref. No.: W1514-01ES

On 8-24-05

TOWNSEND and TOWNSEND and CREW LLP

By: Elizabeth Nesbitt

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Nobumitsu Takaoka et al.

Application No.: 10/816,552

Filed: March 31, 2004

For: Computer System Management  
Program, System and Method

Customer No.: 20350

Confirmation No. 9997

Examiner: Mano Padmanabhan

Technology Center/Art Unit: 2188

PETITION TO MAKE SPECIAL FOR  
NEW APPLICATION PURSUANT TO  
37 C.F.R. § 1.102(d) &  
M.P.E.P. § 708.02, Item VIII,  
ACCELERATED EXAMINATION

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This is a petition to make special the above-identified application in accordance with MPEP § 708.02, Item VIII, accelerated examination. The application has not received any examination by the Examiner.

(A) The Commissioner is authorized to charge the petition fee of \$130 under 37 C.F.R. § 1.17(h), and any additional fees that may be associated with this petition may be charged to Deposit Account No. 20-1430.

(B) All the claims are believed to be directed to a single invention. If the examiner determines that all the claims presented are not obviously directed to a single invention, then Applicant will make an election without traverse as a prerequisite to the grant of special status where the specific grouping of claims will be determined by the examiner.

(C) A pre-examination search was performed by an independent patent search firm. The pre-examination search includes a classification search, a computer database search, and a keyword search. The classification search covered the following classes and sub-classes:

707/ 102, 205

709/ 202

711/ 6, 112, 114, 154, 170, 203

714/ 39

Additionally, a computer database search was conducted on the USPTO systems EAST and WEST. The following references were identified in the search report:

(1) U.S. Patent Nos.:

5,761,411	Teague et al.
5,828,583	Bush et al.
5,935,261	Blachek et al.
5,987,400	Hirano
6,408,406	Parris

(D) The above references are enclosed herewith, collectively as Exhibit A.

(E) Set forth below is a detailed discussion of the references, pointing out with particularity how the claimed subject matter recited in the claims, amended according to the preliminary amendment filed herewith, is distinguishable over the references.

**Claimed Subject Matter of the Present Invention**

Various aspects of the present invention include:

a first feature of the present invention, as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, wherein a storage volume is created in a storage apparatus according to a parameter indicating a characteristic of the storage volume,

a second feature of the present invention, as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, wherein a threshold value is decided in association with performance information indicating performance of the storage volume, wherein the storage volume was created according to a parameter indicating a characteristic of the storage volume,

a third feature of the present invention, as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, wherein acquired performance information indicates the performance of

the storage volume of the storage apparatus, wherein the storage volume was created according to a parameter indicating a characteristic of the storage volume,

a fourth feature of the present invention, as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, wherein the performance information is compared to the threshold value to detect a threshold value violation in a storage volume that was created according to a parameter indicating a characteristic of the storage volume,

a fourth feature of the present invention, as recited in independent claims 15, 17, 19, 20, and 21, wherein a warning notification section compares performance information to a threshold value, detects whether a threshold value is violated in storage volume that was created according a parameter indicating a characteristic of the storage volume, and notifies a warning when a threshold value violation is detected, and

a fifth feature of the present invention, as recited in independent claim 21, wherein a message based on the parameter is added to the warning, the storage apparatus includes a unit for improving performance of the storage apparatus and the message includes a suggestion of use of the unit for improving the performance of the storage apparatus.

**U.S. Patent No. 5,761,411 Teague et al.**

**U.S. Patent No. 5,828,583 Bush et al.**

The U.S. patent to Bush et al (5,828,583) teaches drive failure prediction techniques for disk drives. Specifically, Bush et al. teach a method for predicting an imminent failure of a storage device, wherein the method comprises the steps of: selecting at least one attribute and corresponding threshold value and monitoring the selected attribute(s) during operation of the storage device; detecting occurrence of the selected attribute and updating value of attribute; checking if the updated value of the attribute for the occurrence crosses the corresponding threshold value, and if so, predicting an imminent failure of the storage device. Table II in column 44 of the Bush et al. reference discloses “throughput performance” of the storage device as one of the attributes that can be monitored. Assignee-related (i.e., Compaq Computer Corporation) patent 5,761,411 also teaches the monitoring of similar attributes and their comparison against a preset threshold.

However, neither the '583 nor '411 patents teach or suggest the features of the present invention, including the limitation of creating a storage volume in a storage apparatus according to a parameter indicating a characteristic of the storage volume. Nor do the '583 and '411 patents teach the limitation of deciding a threshold value associated with performance information indicating performance of the storage volume, wherein the storage volume was created according to a parameter indicating a characteristic of the storage volume. Additionally, the '583 and '411 patents also fail to teach the limitation of detecting a threshold value violation in a storage volume that was created according indicating a characteristic of the storage volume. The '583 and '411 patents also fail to teach the limitation of a warning notification section comparing performance information to a threshold value, detecting whether a threshold value is violated in storage volume that was created according a parameter indicating a characteristic of the storage volume, and notifying a warning when a threshold value violation is detected, and the limitation of adding a message based on the parameter to the warning, wherein the message includes a suggestion of use of the unit for improving the performance of the storage apparatus.

More particularly, both the '583 and '411 patents do not teach or suggest the above described first feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described second feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described third feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described fourth feature of the present invention as recited in independent claims 15, 17, 19, 20, and 21, and the above described fifth feature of the present invention as recited in independent claim 21 in combination with the other limitations recited in each of the independent claims.

**U.S. Patent No. 5,935,261 Blachek et al.**

The patent to Blachek et al. (5,935,261) teaches a method and apparatus for detecting handle damage in a disk drive. According to Blachek et al., a microcode routine is stored in the random access memory (RAM) in a DASD, wherein if errors indicating handling damage are detected in a predetermined damage zone 102 exceeding a predetermined threshold,

the disk file 100 returns an error code to the host interface 140 indicating that handling damage is likely to have occurred.

However, the Blachek et al. patent does not teach or suggest the features of the present invention, including the limitation of monitoring performance information and comparing such monitored performance information against a threshold to detect a threshold value violation. Nor does the Blachek et al. patent teach or suggest the creation of a storage volume in a storage apparatus according to a parameter indicating a characteristic of the storage volume. The Blachek et al. patent also fails to teach the limitation of deciding a threshold value associated with performance information indicating performance of the storage volume, wherein the storage volume was created according to a parameter indicating a characteristic of the storage volume. Additionally, the Blachek patent also fails to teach the limitation of detecting a threshold value violation in a storage volume that was created according indicating a characteristic of the storage volume. The Blachek patent also fails to teach the limitation of a warning notification section comparing performance information to a threshold value, detecting whether a threshold value is violated in storage volume that was created according a parameter indicating a characteristic of the storage volume, and notifying a warning when a threshold value violation is detected, and the limitation of adding a message based on the parameter to the warning, wherein the message includes a suggestion of use of the unit for improving the performance of the storage apparatus.

More particularly, the Blachek et al. patent does not teach or suggest the above described first feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described second feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described third feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described fourth feature of the present invention as recited in independent claims 15, 17, 19, 20, and 21, and the above described fifth feature of the present invention as recited in independent claim 21 in combination with the other limitations recited in each of the independent claims.

**U.S. Patent No. 5,987,400 Hirano**

The patent to Hirano (5,987,400) provides for a system for monitoring the throughput performance of a disk storage system. According to Hirano, in a disk storage drive having a CPU, CPU 20 measures the throughput performance of the HDD and predicts an error in the HDD based on the measured throughput performance data.

However, the Hirano patent does not teach or suggest the features of the present invention, including the limitation of monitoring performance information and comparing such monitored performance information against a threshold to detect a threshold value violation. Nor does the Hirano patent teach or suggest the creation of a storage volume in a storage apparatus according to a parameter indicating a characteristic of the storage volume. The Hirano patent also fails to teach the limitation of deciding a threshold value associated with performance information indicating performance of the storage volume, wherein the storage volume was created according to a parameter indicating a characteristic of the storage volume. Additionally, the Hirano patent also fails to teach the limitation of detecting a threshold value violation in a storage volume that was created according indicating a characteristic of the storage volume. The 'Hirano patent also fails to teach the limitation of a warning notification section comparing performance information to a threshold value, detecting whether a threshold value is violated in storage volume that was created according a parameter indicating a characteristic of the storage volume, and notifying a warning when a threshold value violation is detected, and the limitation of adding a message based on the parameter to the warning, wherein the message includes a suggestion of use of the unit for improving the performance of the storage apparatus.

More particularly, the Hirano patent does not teach or suggest the above described first feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described second feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described third feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described fourth feature of the present invention as recited in independent claims 15, 17, 19, 20, and 21, and the above described fifth feature of the present invention as recited in independent claim 21 in combination with the other limitations recited in each of the independent claims.



**U.S. Patent No. 6,408,406 Parris**

The patent to Parris (6,408,406) outlines a hard disk drive infant mortality test. According to Parris, the test retrieves values of a selected set of stored historical performance parameters of the hard disk drive, and then compares the retrieved values against a set of associated performance thresholds. If any of the selected set of stored historical performance parameters exceeds the associated performance threshold, the hard disk drive is marked as defective.

However, the Parris patent does not teach or suggest the features of the present invention, including the limitation of creating a storage volume in a storage apparatus according to a parameter indicating a characteristic of the storage volume. Nor does the Parris patent teach the limitation of deciding a threshold value associated with performance information indicating performance of the storage volume, wherein the storage volume was created according to a parameter indicating a characteristic of the storage volume. Additionally, the Parris patent also fails to teach the limitation of detecting a threshold value violation in a storage volume that was created according to a parameter indicating a characteristic of the storage volume. The Parris patent also fails to teach the limitation of a warning notification section comparing performance information to a threshold value, detecting whether a threshold value is violated in storage volume that was created according to a parameter indicating a characteristic of the storage volume, and notifying a warning when a threshold value violation is detected, and the limitation of adding a message based on the parameter to the warning, wherein the message includes a suggestion of use of the unit for improving the performance of the storage apparatus.

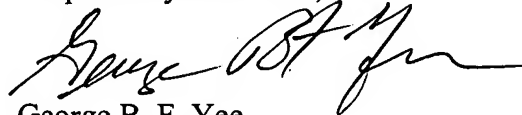
More particularly, the Parris patent does not teach or suggest the above described first feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described second feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described third feature of the present invention as recited in independent claims 1, 9, 10, 15, 17, 19, 20, and 21, the above described fourth feature of the present invention as recited in independent claims 15, 17, 19, 20, and 21, and the above

described fifth feature of the present invention as recited in independent claim 21 in combination with the other limitations recited in each of the independent claims.

**Conclusion**

In view of this comments presented in the instant petition and the claim amendments presented in the accompanying preliminary amendment, the Examiner is respectfully requested to issue a first Office Action at an early date.

Respectfully submitted,



George B. F. Yee  
Reg. No. 37,478

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60570984 v1



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